



UNITED STATES PATENT AND TRADEMARK OFFICE

mf

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/918,380

07/30/2001

Indra Laksono

VIXS.0100090

9961

29331

7590

09/21/2006

LARSON NEWMAN ABEL POLANSKY & WHITE, LLP
5914 WEST COURTYARD DRIVE
SUITE 200
AUSTIN, TX 78730

EXAMINER

DIEP, NHON THANH

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,380

Applicant(s)

LAKSONO ET AL.

Examiner

Nhon T. Diep

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 13, 30 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Ducharme (US 2002/0178278 A1).

Ducharme discloses a method and apparatus for providing graphical overlays in a multimedia system comprising the same integrated single chip system comprising: a first processor to receive digital video data and provide parsed video data (fig. 1, el. 28); a second processor coupled to the first processor to access the parsed video data, the second processor including a video transcoder (fig. 1, el. 30) as specified in claims 13, 30 and 44 (fig. 1, multimedia source 22 and packet of channel data 76).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 30-35 and 37-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Liu (EP 0 889 650 A2).

Liu discloses a method and apparatus for processing a bitstream comprising the same method comprising: receiving one or more packets having a video data payload and information related to the video data payload, wherein the video data payloads of the one or more packets represent a first channel of compressed video data having a characteristic represented by a first value (fig. 2, el. 112, col. 7, ln. 12-31); and transcoding (el. 114, 118, 130, 124) the video data payload of the one or more packets to generate a representation of a second channel of compressed video data having the characteristic represented by a second value (output 126 of el. 124) as specified in claims 30 and 44; wherein the characteristic is a compression factor (col. 7, ln. 12-31) as specified in claims 31 and 45; wherein the characteristic is a scale factor (col. 12, ln. 42-47) as specified in claims 32 and 46; wherein transcoding the video data payloads comprises: decompressing the video data payload to generate a first intermediate data (fig. 2, el. 114-116); scaling the first intermediate data to generate a second intermediate data (el. 118-122); and compressing the second intermediate data to generate the representation of the second channel (el. 124-126) as specified in claims 33 and 47; wherein transcoding the video data payloads comprises: decompressing the video data payloads to generate a first intermediate data, wherein the first intermediate data is frequency domain data (fig. 3, output of 207 = DCT coefficients (frequency domain)); converting the first intermediate data to a second intermediate data (fig. 3, output of 209 = original image (time domain)), wherein the second intermediate data is

Art Unit: 2621

time domain data having the characteristic represented by the first value (the original image as being quantized by the original quantization step size Q1); converting the second intermediate data to a third intermediate data having the characteristic represented by the second value (output of el 209-bus 136-130-bus-140-309); and compressing the third intermediate data to generate the representation of the second channel (el. 307 with Q2-305-303-301-126) as specified in claims 34 and 48; wherein receiving the one or more packets includes: storing the video data payload of the one or more packets in a first memory (decoded bitstream processor 118) and storing the information associated with the video data payloads in a second memory (forwarding module 130 is used to stored and feed encoder bitstream information including motion vector to encoder 124 and col. 17, ln. 19-26) as specified in claim 35; wherein video data payloads are transcoded based at least in part on the information associated with the video data payloads (re-used bitstream parameter: col. 7, ln. 56- col. 8, ln. 1 or col. 17, ln. 19-26) as specified in claims 37 and 49; wherein the information associated with a video data payload indicates that the digital data payload includes one or more of video time stamp information, picture configuration information, slice information, macroblock information, motion vector information, quantizer matrix information, or specific picture location information (re-used bitstream parameter: col. 7, ln. 56- col. 8, ln. 1 or col. 17, ln. 19-26) as specified in claims 38 and 50; wherein receiving the one or more packets and transcoding the video data payloads support a real-time play back of the representation of the second channel (col. 22, ln. 12-18) as specified in claim 39; further comprising: providing the representation of the second channel of compressed

Art Unit: 2621

video data for reception by at least one multimedia device (multimedia device = television, radio, print and the internet, col. 1, ln. 22-40) as specified in claim 40; further comprising: receiving, at a first data processor, a data stream including video data at a first data processor; and parsing, at the first data processor, the data stream to identify video data associated with a first channel; and packetizing, at the first data processor, the video data associated with the first channel to generate the one or more packets (fig. 2, el. 112-114) as specified in claims 41 and 51; receiving the one or more packets and transcoding the video data payloads are performed at a second data processor (el. 122-126) as specified in claim 42; wherein the first data processor includes a general purpose processor and the second data processor includes a video processor (el. 114 and 126) as specified in claims 43 and 52.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al, in view of Ducharme.

Wang et al discloses a dynamic bit allocation comprising the same integrated single chip system comprising: processor to receive digital video data and provide parsed video data; processor to access the parsed video data, the processor including a

Art Unit: 2621

video transcoder (figs. 3 and 4) as specified in claim 13; wherein the first processor is a general purpose processor (fig. 1, el. 155) as specified in claim 14; wherein the second processor further includes: a data decompression portion; a scalar; and a data compression portion (fig. 3 and fig. 4, el. 400, 225, 230, 450) as specified in claim 15; wherein the decompression portion includes a portion to perform a frequency domain to a time domain transform (IDCT) as specified in claims 16-17; wherein the decompression portion includes a portion to perform a de-quantization of data (fig. 4, el. 420) as specified in claim 18; wherein the decompression portion includes a portion to perform a DeZigZag of data; a buffered motion predictor (fig. 4, el. 410) as specified in claims 19 and 23-24; wherein the decompression portion includes a motion compensation portion (fig. 4, el. 455) as specified in claims 20-22; wherein the compression portion further includes a portion to perform a time domain to a frequency domain transform (el. 222) as specified in claim 25-26; wherein the compression portion includes a motion vector generator (fig. 4 output of el. 220 to el. 230, also fig. 2, el. 220 and MV) as specified in claim 27; and wherein the motion vector generator includes a buffered motion predictor (el. 250, 255) as specified in claim 28; and the second processor is coupled to the first processor through a memory controller and a sequencer (fig. 1 should contain a memory controller and a sequencer to differentiate, route different video signals to their respective decoders) as specified in claim 29. It is noted that Wang et al does not particularly disclose that processor to receive digital video data and provide parsed video data is a first processor and is different than the second processor, which accesses the parsed video data, the processor including a

Art Unit: 2621

video transcoder. Ducharme teaches that a separate module is used to parse incoming multimedia sources, which comprises a plurality of different video bitstream and a second module coupled to the first module accesses the parsed data and the second module is also a transcoding module. Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Wang et al by separating the parsing and transcoding and using two separate modules to handle these two separate tasks as taught by Ducharme. Doing so would help to simplify the transcoding process by separating the multiple different video bitstreams to individual video bitstream before transcoding.

7. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liu.

As applied to claim 35 above, it is noted that Liu does not particularly disclose that the buffer memories as used to hold video data payloads and associated video information are the same type of buffer memory nor they are of the different type of memory; however, in the absence of any contradictory teachings, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to construct the first memory and the second memory as of the same type of memory for the sake of simplicity.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Liu et al (US 6,904,094) discloses a processing mode selection for channels in a video multi-processor system.

b. Liang et al (US 2002/0196853 A1) discloses a reduced resolution video decompression.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ND
9/18/2006



NHON DIEP
PRIMARY EXAMINER